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(54) A machine for shaping boxes from a heat-weldable material

(57) The machine includes means for supply of the unfolded boxes (2), means of transport picking up the boxes from the means of supply and arranging them in a heating unit, means for immobilizing the unfolded boxes in the heating unit, a box former (14); a treader-former

(20) introducing the unfolded box in the box former, obtaining the folding of its sides with respect to the base, means of pressing determining the heat welding of the opposite ends of the adjoining sides of the shaped box and means for removing the shaped boxes by the machine.

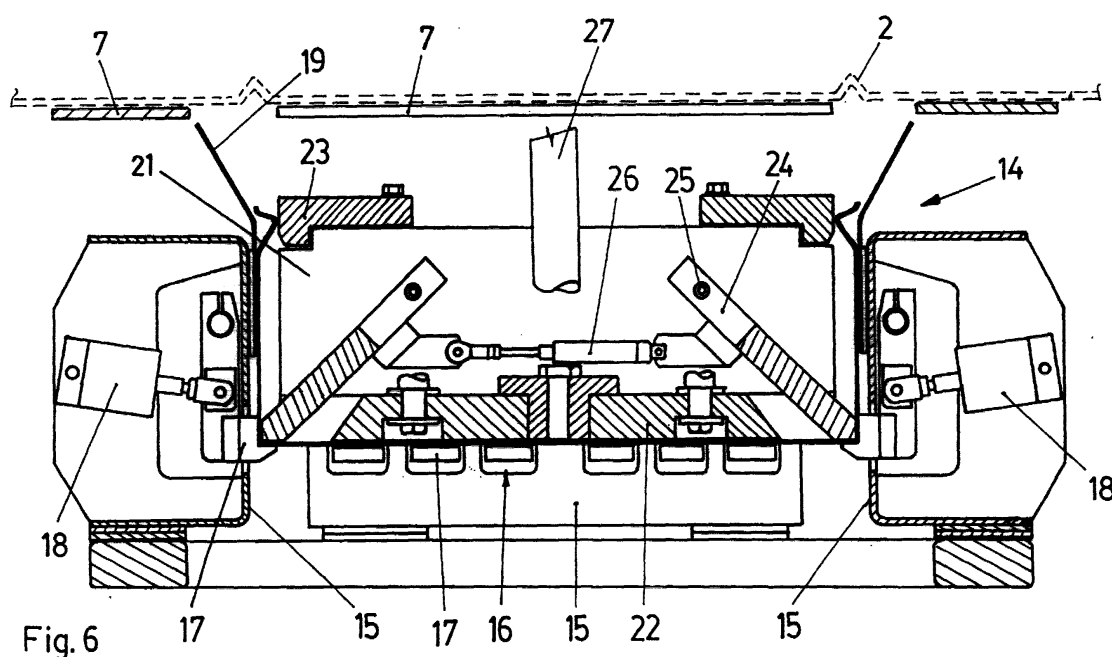


Fig. 6



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 01 11 9324

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 4 936 815 A (KIRKLAND THOMAS R ET AL) 26 June 1990 (1990-06-26) * the whole document *	1-23	B31B3/46
A	EP 0 436 236 A (NORSK HYDRO TECHNOLOGY) 10 July 1991 (1991-07-10) * the whole document *	1,7-10, 16,22,23	
A	GB 2 268 701 A (BOIX MAQUINARIA SA) 19 January 1994 (1994-01-19) * page 3, last paragraph - page 4; figures *	1,8-10	
A	US 3 602 108 A (VUILLEUMIER RALPH O ET AL) 31 August 1971 (1971-08-31) * the whole document *	13-21	
A	GB 900 118 A (JOHN CLELAND & SON LTD) 4 July 1962 (1962-07-04) * figures *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B31B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		22 April 2002	Pipping, L
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 11 9324

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22-04-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4936815	A	26-06-1990	NONE	
EP 0436236	A	10-07-1991	NO 900059 A	08-07-1991
			CA 2033616 A1	06-07-1991
			EP 0436236 A1	10-07-1991
			US 5147270 A	15-09-1992
GB 2268701	A	19-01-1994	ES 2066669 A1	01-03-1995
			BE 1007271 A4	09-05-1995
			BR 9302495 A	25-01-1994
			CA 2100628 A1	17-01-1994
			DE 4323802 A1	27-01-1994
			ES 2124150 A1	16-01-1999
			FR 2694266 A1	04-02-1994
			GR 93100305 A	31-03-1994
			IL 106361 A	31-10-1996
			IT 1265014 B1	17-10-1996
			MX 9304272 A1	31-03-1994
			NL 9301255 A ,B,	16-02-1994
			PT 101309 A ,B	30-06-1994
			US 5382155 A	17-01-1995
US 3602108	A	31-08-1971	NONE	
GB 900118	A	04-07-1962	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82